

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1-15. (Cancelled)

16. (Currently Amended) A call admission control method in a node of an ~~for~~ Internet Protocol (IP) Differentiated Services (DiffServ) networks ~~having at least one node for interpreting signaling messages and controlling traffic load in the network~~ network for controlling admission of a traffic mix relating to a number of different traffic classes of which at least one is a real-time traffic class, said method including an initialization phase and a real-time phase, comprising the steps of:

determining whether a descriptor of a traffic class ~~changes~~ has changed;

invoking the an initialization phase if said descriptor of a traffic class has ~~changed~~, said initialization phase comprising ~~the steps of:~~ computing the coefficients of approximating hyperplanes of delay constraints of at least one traffic class;

storing the coefficients of said approximating hyperplanes; and,

said performing a real-time phase comprising the steps of:

determining whether a stability constraint is fulfilled;

determining whether a delay constraint is fulfilled;

admitting a traffic mix if, for each real-time traffic class, both the stability and the delay constraints are fulfilled; and,

rejecting a traffic mix if, for each real-time traffic class, either the stability or the delay constraints are not fulfilled.

17. (Previously Presented) The call admission control method of claim 16, wherein said network is a Universal Mobile Telecommunication System Terrestrial Radio Access Networks (UTRAN) comprising at least one base station and a Radio Network Controller (RNC).

18. (Previously Presented) The call admission control method of claim 16, wherein the steps of said initialization phase are repeated if said descriptor of a traffic class changes.

19. (Previously Presented) The call admission control method of claim 16, wherein the steps of determining the stability constraint and the step of determining the delay constraint are performed simultaneously.

20. (Previously Presented) The call admission control method of claim 16, wherein the steps of computing the coefficients of approximating hyperplanes comprises the steps of calculating the arrays of:

the number of approximating hyperplanes for each real-time class i ;

the effective bandwidth value for each class j session expressed in number of each class i sessions in scheduling model M ;

the maximal number of each class i sessions in scheduling model M if no ongoing sessions from other classes are present; and,

the capacity share of each real-time queue q if each other real-time queues are empty.

21. (Previously Presented) The call admission control method of claim 16, wherein the step of determining whether said stability constraint is fulfilled includes evaluating the number of lost packets and comparing it to the tolerated packet loss ratio for each class in that queue.

22. (Previously Presented) The call admission control method of claim 16, wherein the step of determining whether said delay constraint is fulfilled includes checking if the traffic mix is below at least one of the approximating hyperplanes in the space of number of sessions for each class.

23. (Previously Presented) The call admission control method of claim 16, wherein the step of determining whether said delay constraint is fulfilled comprises the steps of:

- determining whether each traffic class is checked;
- selecting the next traffic class if not each of traffic class is checked;
- determining whether each hyperplane of that traffic class is checked;
- selecting next hyperplane if not each of hyperplanes of that traffic class is checked; and,
- determining whether N is below of that hyperplane, where N is a vector defining the number of sessions is each traffic class.

24-30. (Cancelled)

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